This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Cancelled).
- 2. **(Currently Amended)** A computer-implemented method for scoring a severity of a neurological event associated with a nervous system disorder, the <u>computer-implemented</u> method comprising:
 - (a) determining that a sensed neurological signal represents at least one neurological event;
 - (b) identifying at least one feature of the at least one neurological event to use in scoring, wherein the at least one neurological event is selected from the group consisting of a detection cluster event and a reported event;
 - (c) computing <u>using a processor</u> a score of relative severity of the at least one neurological event using the identified feature; and
 - (d) ranking the at least one neurological event by severity relative to at least one other scored neurological event.
- 3. **(Previously Presented)** The method of claim 2, wherein the at least one feature identified in (b) is selected from the group consisting of a duration of a seizure detection, a spread, a number of clusters per unit time, a number of detections within a cluster, a duration of an event cluster, a duration of a detection, and an inter-seizure interval.
 - 4. **(Previously Presented)** The method of claim 2, further comprising:
 - (e) communicating the ranked events to an external device.
 - 5. **(Previously Presented)** The method of claim 2, further comprising:
 - (e) displaying the ranked events.
- 6. **(Previously Presented)** The method of claim 2, wherein the ranking in (d) is performed by an implanted device.
- 7. **(Previously Presented)** The method of claim 2, wherein the identifying the at least one feature in (b) comprises:
 - (i) using algorithm-based measures of activity of the nervous system disorder.

- 8. **(Previously Presented)** The method of claim 5, wherein the nervous system disorder is a seizure and the computing the score in (c) comprises:
 - (i) relating duration, intensity, and extent of electrographic spread of the nervous system disorder.

9. (Cancelled).

- 10. **(Previously Presented)** The method of claim 2, wherein the feature is selected from the group consisting of a number of monitoring elements involved in the event, a number of clusters per unit time, a number of detections within a detection cluster, a duration of a detection cluster, a duration of a detection, and an inter-seizure interval.
- 11. **(Previously Presented)** The method of claim 2, wherein the computing the score in (c) comprises:
 - (i) computing a relative severity minimum, wherein the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.
- 12. **(Previously Presented)** The method of claim 2, wherein the sensed neurological signal is received from a monitoring element and is selected from the group consisting of a chemical signal, a biological signal, a temperature signal, a pressure signal, a respiration signal, a heart rate signal, a ph-level signal, and a peripheral nerve signal.

13. (Cancelled).

14. **(Previously Presented)** The method of claim 2, wherein the nervous system disorder is selected from the group consisting of a peripheral nervous system disorder, a mental health disorder, and a psychiatric disorder.

Claims 15-32. (Cancelled).

- 33. **(Currently Amended)** A <u>computer-implemented</u> method for determining the severity of a detection cluster comprising:
 - (a) determining that a sensed neurological signal represents a detection cluster;
 - (b) identifying at least one feature in the detection cluster;
 - (c) computing <u>using a processor</u> a score of relative severity of the detection cluster using the identified at least one feature, wherein the computed score is selected

- from a range of at least three values including an upper value and a lower value; and
- (d) ranking the detection cluster by severity relative to previously scored detection clusters.
- 34. **(Previously Presented)** The method of claim 33, wherein the at least one feature identified in (b) is selected from the group consisting of a spread of the detection cluster, a number of detection clusters per unit time, a number of detections within the detection cluster, a detection cluster severity, and an inter-seizure interval.
- 35. (Previously Presented) The method of claim 33, wherein the computing of the score in (c) comprises:
 - (i) computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.
- 36. (Previously Presented) The method of claim 33, wherein the computing of the score in (c) comprises:
 - (i) allowing a user to exclude a certain event from being scored.
- 37. **(Previously Presented)** The method of claim 33, wherein (b)-(d) occur after the detection cluster has ended.
- 38. **(Currently Amended)** A <u>computer-implemented</u> method for determining the severity of a detected neurological event comprising:
 - (a) receiving a neurological signal;
 - (b) processing the neurological signal to detect a neurological event;
 - (c) characterizing at least one feature of the detected neurological event; and
 - (d) computing <u>using a processor</u> a score of severity of the neurological event based on the at least one feature, wherein the computed score is selected from a range of at least three values including an upper value and a lower value.
 - 39. **(Previously Presented)** The method of claim 38, further comprising:
- (e) ranking the neurological event relative to at least one other neurological event, the ranking based on the severity score.

- 40. **(Previously Presented)** The method of claim 39, wherein the feature characterized in (c) is selected from the group consisting of a spread of the detection cluster, a number of detection clusters per unit time, a number of detections within the detection cluster, a detection cluster severity, and an inter-seizure interval.
- 41. **(Previously Presented)** The method of claim 39, wherein the computing in (d) comprises:
 - (i) computing a relative severity minimum, in which the lowest relative severity score associated with clinical manifestations or other behaviors indicative of a nervous system disorder activity may be used to minimize a probability of missing clinical events.
- 42. **(Previously Presented)** The method of claim 39, wherein the computing in (d) comprises:
 - (i) allowing a user to exclude a certain event from being scored.
- 43. **(Previously Presented)** The method of claim 38, wherein (c)-(d) occur after the detected neurological event has concluded.